CLAIM AMENDMENTS

Please amend claims 1, 5, 12, 23-25, 28, 31-33, and 37 as follows.

1. (Currently Amended) A system, comprising:

a first legacy device;

a transmission medium;

a second legacy device;

a first network adapter coupled to the first legacy device, the first network adapter having ~~circuitry~~ an optical receiver to receive a data code sequence on an infrared ~~pulses~~ signal, the data code sequence including pulses, the pulses having a predetermined width, the data code sequence including gaps positioned between the pulses, the gaps having a predetermined width, a combination of data code sequence pulses and data code sequence gaps representing at least a start sequence, the data code sequence recognized by the second legacy device and to control the second legacy device, the first network adapter having ~~circuitry~~ a network interface to generate a representation of the data code sequence from the data code sequence, the first network ~~device~~ adapter having a first optical transmitter to transfer the representation of the data code sequence to the transmission medium; and

a second network adapter being wirelessly coupled to the second legacy device, the second network adapter to transfer the representation of the data code sequence from the transmission medium to the second legacy device,

the second legacy device having circuitry to transfer an analog audio signal to the second network adapter in response to the representation of the data code sequence,

the second network adapter having circuitry to encode the analog audio signal into a digital audio data stream, the second network adapter having circuitry to transfer the digital audio data stream to the first network adapter via the transmission medium,

the first network adapter having circuitry to decode the digital audio data stream back into the analog audio signal, and circuitry to transfer the analog audio signal to the first legacy device.

2. (Original) The system of claim 1, wherein the transmission medium is a wired transmission medium.

3. (Original) The system of claim 2, wherein the transmission medium is a twisted pair, an IEEE 1394 Serial Bus, or an Ethernet transmission medium.

4. (Original) The system of claim 1, wherein the transmission medium is a wireless transmission medium.

5. (Currently Amended) The system of claim [[1]] 4, wherein the wireless transmission medium comprises at least one of a Bluetooth transmission protocol, an 802.11a protocol, an 802.11b protocol, an 802.11e protocol, or an 802.11g protocol.

6. (Original) The system of claim 1, wherein the first network adapter includes circuitry coupled to receive the data code sequence via infrared pulses.

7 (Original) The system of claim 1, wherein the second network adapter includes circuitry to transmit the representation of the data code sequence to the second legacy device via infrared pulses.

8. (Original) The system of claim 7, wherein the second legacy device includes circuitry to receive infrared pulses.

9. (Original) The system of claim 1, further comprising a remote control unit to transmit the data code sequence to the first network adapter.

10. (Original) The system of claim 1, further comprising a wireless keyboard to transmit the data code sequence to the first network adapter.

11. (Original) The system of claim 1, further comprising a personal digital assistant to transmit the data code sequence to the first network adapter.

12. (Currently Amended) A system, comprising:

a first legacy device;

a transmission medium;

a second legacy device;

a first network adapter coupled to the first legacy device, the first network adapter having circuitry to receive a data code sequence on an optical signal, the data code sequence including pulses, the pulses having a predetermined width, the data code sequence including gaps positioned between the pulses, the gaps having a predetermined width, a combination of data code sequence pulses and data code sequence gaps representing at least a start sequence, the data code sequence recognized by a second legacy device and to control the second legacy device, the first network adapter having circuitry to generate a representation of the data code sequence from the data code sequence, the first network device to transfer the representation of the data code sequence to the transmission medium; and

a second network adapter being wirelessly coupled to the second legacy device, the second network adapter having a second transmitter to transfer the representation of the data code sequence from the transmission medium to the second legacy device,

the second legacy device having circuitry to transfer an analog video signal to the second network adapter in response to the representation of the data code sequence,

the second network adapter having circuitry to encode the analog video signal into a digital video data stream,

the second network adapter having circuitry to transfer the digital video data stream to the first network adapter via the transmission medium,

the first network adapter having circuitry to decode the digital video data stream back into the analog video signal, and circuitry to transfer the analog video signal to the first legacy device.

13. The system of claim 12, wherein the transmission medium is a wired transmission medium.

14. The system of claim 13, wherein the transmission medium is a twisted pair, an IEEE 1394 Serial Bus, or an Ethernet transmission medium.

15. The system of claim 12, wherein the transmission medium is a wireless transmission medium.

16. The system of claim 15, wherein the wireless transmission medium comprises at least one of a Bluetooth transmission protocol, an 802.11a protocol, an 802.11b protocol, an 802.11e protocol, or an 802.11g protocol.

17. (Original) The system of claim 12, wherein the first network adapter includes circuitry coupled to receive the data code sequence via infrared pulses.

18. (Original) The system of claim 12, wherein the second network adapter includes circuitry to transmit the representation of the data code sequence to the second legacy device via infrared pulses.

19. (Original) The system of claim 12, wherein the second legacy device includes circuitry to receive infrared pulses.

20. (Original) The system of claim 12, further comprising a remote control unit to transmit the data code sequence to the first network adapter.

21. (Original) The system of claim 12, further comprising a wireless keyboard to transmit the data code sequence to the first network adapter.

22. (Original) The system of claim 12, further comprising a personal digital assistant to transmit the data code sequence to the first network adapter.

23. (Currently Amended) An apparatus, comprising:

circuitry to receive a data code sequence via infrared pulses the data code sequence recognized by a first legacy device and to control the first legacy device;

circuitry to generate a representation of the data code sequence from the data code sequence;

circuitry to transfer the representation of the data code sequence to a transmission medium;

circuitry to wirelessly transfer the representation of the data code sequence from the transmission medium to a second legacy device;

circuitry to receive a digital audio data stream from the transmission medium;

circuitry to decode the digital audio data stream into an analog audio signal; and

circuitry to transfer the analog audio signal to [[a]] the second legacy device.

24. (Currently Amended) An apparatus, comprising:

circuitry to receive a data code sequence via infrared pulses, the data code sequence recognized by a first legacy device and to control the first legacy device;

circuitry to generate a representation of the data code sequence from the data code sequence;

circuitry to transfer the representation of the data code sequence to a transmission medium;

circuitry to wirelessly transfer the representation of the data code sequence from the transmission medium to a second legacy device;

circuitry to receive a digital video data stream from the transmission medium;

circuitry to decode the digital video data stream into an analog video signal; and

circuitry to transfer the analog video signal to [[a]] the second legacy device.

25. (Currently Amended) An apparatus, comprising:

circuitry to receive a data code sequence via infrared pulses, the data code sequence recognized by a first legacy device and to control the first legacy device;

circuitry to generate a representation of the data code sequence from the data code sequence;

circuitry to transfer the representation of the data code sequence to a transmission medium;

circuitry to wirelessly transfer the representation of the data code sequence from the transmission medium to a second legacy device;

circuitry to receive a digital audio data stream and a digital video data stream from the transmission medium;

circuitry to decode the digital audio data stream and a digital video data stream into an analog audio signal and an analog video signal, respectively; and

circuitry to transfer the analog audio signal and the analog video signal to [[a]] the second legacy device.

26. (Original) The system of claim 25, further comprising circuitry to multiplex the digital audio data stream with the digital video data stream and to transfer the multiplexed digital audio data stream and digital video data stream to the transmission medium.

27. (Original) The system of claim 26, further comprising circuitry to receive the multiplexed digital audio data stream and the digital video data stream from the transmission medium and to de-multiplex the digital audio data stream from the digital video data stream.

28. (Currently Amended) A method, comprising:

receiving a data code sequence via infrared pulses, the data code sequence recognized by a first legacy device and to control the first legacy device;

generating a representation of the data code sequence from the data code sequence;

transferring the representation of the data code sequence to a transmission medium;

wirelessly transferring the representation of the data code sequence from the transmission medium to a second legacy device;

receiving a digital audio data stream and a digital video data stream from the transmission medium;

decoding the digital audio data stream and a digital video data stream into an analog audio signal and an analog video signal, respectively; and

transferring the analog audio signal and the analog video signal to [[a]] the second legacy device.

29. (Original) The system of claim 28, further comprising multiplexing the digital audio data stream with the digital video data stream and transferring the multiplexed digital audio data stream and digital video data stream to the transmission medium.

30. (Original) The system of claim 29, further comprising receiving the multiplexed digital audio data stream and the digital video data stream from the transmission medium and de-multiplexing the digital audio data stream from the digital video data stream.

31. (Currently Amended) A method, comprising:

receiving a data code sequence via an infrared ~~pulses~~ signal, the data code sequence including pulses, the pulses having a predetermined width, the data code sequence including gaps positioned between the pulses, the gaps having a predetermined width, a combination of data code sequence pulses and data code sequence gaps representing at least a start sequence, the data code sequence recognized by a first legacy device and to control the first legacy device;

generating a representation of the data code sequence from the data code sequence;

transferring the representation of the data code sequence to a transmission medium;

receiving a digital audio data stream from the transmission medium;

decoding the digital audio data stream into an analog audio signal; and

transferring the analog audio signal to a second legacy device.

32. (Currently Amended) A method, comprising:

receiving a data code sequence via an infrared ~~pulses~~ signal, the data code sequence including pulses, the pulses having a predetermined width, the data code sequence including gaps positioned between the pulses, the gaps having a predetermined width, a combination of data code sequence pulses and data code sequence gaps representing at least a start sequence, the data code sequence recognized by a first legacy device and to control the first legacy device;

generating a representation of the data code sequence from the data code sequence;

transferring the representation of the data code sequence to a transmission medium;

receiving a digital video data stream from the transmission medium;

decoding the digital video data stream into an analog video signal; and

transferring the analog video signal to a second legacy device.

33. (Currently Amended) A method, comprising:

receiving a data code sequence on infrared pulses, the data code sequence recognized by a first legacy device and to control the first legacy device;

generating a representation of the data code sequence from the data code sequence;

transferring the representation of the data code sequence to a transmission medium;

transferring the representation of the data code sequence from the transmission medium to the first legacy device;

wirelessly transfer the representation of the data code sequence from the transmission medium to a second legacy device;

receiving an analog audio signal from the first legacy device in response to the representation of the data code sequence and encoding the analog audio signal into a digital audio data stream; [[and,]]

transferring the digital audio data stream to the transmission medium;

receiving the digital audio data stream from the transmission medium and decoding the digital audio data stream back into the analog audio signal; and

transferring the analog audio signal to [[a]] the second legacy device.

34. (Original) The method of claim 33, further comprising converting the digital audio data stream into format compatible with the electrical characteristics of the transmission medium.

35. (Original) The method of claim 34, further comprising converting the digital audio data stream into format compatible with the electrical characteristics of a twisted pair, an IEEE 1394 Serial Bus, or an Ethernet transmission medium.

36. (Original) The method of claim 33, further comprising converting the digital audio data stream into format compatible with the electrical characteristics of a wireless transmission medium.

37. (Currently Amended) A method, comprising:

receiving a data code sequence on infrared pulses, the data code sequence recognized by a first legacy device and to control the first legacy device;

generating a representation of the data code sequence from the data code sequence;

transferring the representation of the data code sequence to a transmission medium;

transferring the representation of the data code sequence from the transmission medium to the first legacy device;

wirelessly transfer the representation of the data code sequence from the transmission medium to a second legacy device;

receiving an analog video signal from the first legacy device in response to the representation of the data code sequence and encoding the analog video signal into a digital video data stream; [[and,]]

transferring the digital video data stream to the transmission medium;

receiving the digital video data stream from the transmission medium and decoding the digital video data stream back into the analog video signal; and

transferring the analog video signal to a second legacy device.

38. (Original) The system of claim 37, further comprising converting the digital video data stream into format compatible with the electrical characteristics of the transmission medium.

39. (Original) The system of claim 38, further comprising converting the digital video data stream into format compatible with the electrical characteristics of a twisted pair, an IEEE 1394 Serial Bus, or an Ethernet transmission medium.

40. (Original) The system of claim 38, further comprising converting the digital video data stream into format compatible with the electrical characteristics of a wireless transmission medium.

41. (Original) The system of claim 40, further comprising converting the digital video data stream into format compatible with the electrical characteristics at least one of a Bluetooth transmission protocol, an 802.11a protocol, an 802.11b protocol, an 802.11e protocol, or an 802.11g protocol.